THE GENESEE FARMER.

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PUBLISHED BY LUTHER TUCKER,

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

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☞ THE MONTHLY GENESEE FARMER is made up of selections from this paper, and published on the first of each month, forming, with the Title-page and index, an annual volume of 200 pages, at the low price of FIFTY CENTS a year, *payable always in advance*.—Eleven copies for Five Dollars.

THE GENESEE FARMER.

SATURDAY, MAY 19, 1838.

NOTICES.

THE CULTIVATOR.—Nos. 1, 2 and 3 of Vol. 5, have just been received. It has been enlarged, and is a well filled and beautiful sheet, worth twice the subscription price, which is $1 per year. The pages are the same width, and about an inch longer than those of the Monthly Genesee Farmer; and we maintain, notwithstanding the calculation of the Judge's printer, that the latter paper contains more *ms* than the former—the Monthly Genesee Farmer being all in *Brevier*, and the Cultivator mostly in *Burgeois* type. It is truly "a small matter;" but if it was worth calculating at all, it should have been done correctly. In regard to the "*Guessing*." Was it necessary to *see* the sheet of paper, after having been told, as we were in the Dec. No. of the Cultivator, the precise number of inches of its length and breadth, to enable us to judge of its size. We neither "judged correctly," nor incorrectly, "of the matter" the Cultivator would contain, for we said nothing about it, and consequently made neither a "wanton" or accidental "error." "Comparisons are odious," and we neither meant to make any, in the article from which the Judge quotes, with his or any other paper, nor do we now, any farther than is necessary in self-defence. The Cultivator, we repeat, is richly worth double its cost, to any man who will read it, whether he be a farmer or not; and it will afford us pleasure to forward the names and money of any of our friends who may desire to benefit themselves by becoming subscribers to it.

THE SILK CULTURIST.—This truly valuable sheet completed its 3d vol. in March. The editor gives notice that for the purpose of availing himself of facilities for practical operations, experiments, &c. he has removed to Wethersfield, from which place the next volume of that paper will be issued. Price $1 per year. Address F. G. COMSTOCK, Editor Silk Culturist, Wethersfield, Conn.

INDIANA FARMER.—We have inadvertently neglected to notice the accession of our friend, JACOB S. WILLETTS, to the editorial department of this paper. Mr. W. was from this state, and is thoroughly imbued with the spirit of agricultural improvement. The Indiana Farmer is published at Indianapolis, by Osborn & Willetts, at $2,50 per annum, and we hope receives the patronage it richly merits.

JOURNAL OF THE AMERICAN INSTITUTE.—This valuable Journal is not so extensively known as it should be. It is published monthly, each number containing 56 pages, octavo, at $4,00 per annum. Beside the proceedings of the Institute, it abounds with articles interesting to the agriculturist, the statesman, and the political economist.

WISCONSIN CULTURIST.—This is the title of the last new paper devoted to agriculture that has reached us from the Great West. It is but a few weeks since we announced one from Michigan, and now one hails us from Wisconsin, a territory and population of but yesterday. The Culturist is published semi-monthly, on a respectable sized sheet, 8 pages 8 vo. at $1 a year; and the matter and manner of the first number is good. Whether a publication like the Culturist can be sustained as it should be, in so new a territory and so sparse a population, remains to be seen; but we are confident that a little of the surplus cash of the farmers of that region cannot be more worthily expended, than in paying for journals devoted, like the Culturist, to the great cause of agriculture. It is published at Milwaukee—let it go ahead.

THE PRACTICAL FARMER is the title of a monthly sheet, 24 pages, 12 mo. received from Mechanicsburgh, Pa. at 62½ cents a year.

☞ Why do we not receive the *Farmer's Cabinet* and *Buckeye Plough-Boy?*

To CORRESPONDENTS.—We have a communication from Mr. HENRY CHAPIN, and one from "L. A. M." which will be given next week. "ELBA" should not let his 'first effort,' which is published in this number be his "last." We hope to hear from him frequently.

MANURES.

Perhaps there is no point which more strongly marks the difference between the old husbandry, and the new, than the increased formation and application of manure; and there is no one which more clearly evinces the superiority of the latter; since, however wide the chemist and the farmer may differ as to the food of plants, all are agreed that animal manures furnish it the greatest quantity, and that the productiveness of cultivated land is in a great measure determined by the quantity of manure applied. Under the improved system of a rotation of crops, root culture, and alternation of grass and grain, combined with yard and stall feeding of sheep and cattle, the quantity of manure produced on the same farms has in many instances been quadrupled, and the amelioration of the soil has been in the same proportion.

The value of the manure produced in Great Britain taken in connection with her agriculture, may be seen from the fact that it is estimated by McCulloch at about 250 millions of dollars, while the whole of the cotton manufacture of the kingdom is only about 230 millons; and if it is not rated as high in the United States, it is because so much of our country has been but lately brought into cultivation, and its necessity and value is therefore not felt or appreciated.

In this country, it is where manure has been used the longest that its value is best understood, and the greatest efforts made to procure it for application to the soil; but even in these places the means of increasing the quantity that should be applied to the land, that are adopted by European nations, would be considered at present as burdensome and non-paying. Ship loads of bones have been carried from this country to Europe to be crushed and used as bone dust in fertilizing their soils; and we have been compelled to purchase at exhorbitant prices of those nations, the wheat and other grain, that this same manure would have produced at home, and at the same time have lost to our farms the fertility it would have imparted.

Long Island, that part of it in particular lying near New-York, has long and justly been considered the most fertile spot and the one that best pays for cultivation, of any in the United States. To what is this fertility owing? Not to the natural qualities of the soil, for in these it is far inferior to many in other sections of the country; not altogether to improved methods of tilling, or the advantages of a market, though these must have had their influence in stimulating industry;—but mainly to an increased attention to the production, purchase, and application of manures. The sweepings of the streets and the manure from the city stables,—the leached ashes from the country on both sides af the North river,—the ashes and refuse from the soap boilers' manufactories, wherever they could be procured on the Atlantic coast without regard to distance,—the lime and marl of New Jersey, and the treasures of the deeep in the shape of the Manhaden or Mossbunker fish, have all been called in requisition, and the result has been, that in productiveness, that Island may be considered the garden of America.

It is true that the farmers of Long Island, as well as those in the neighborhood of other cities and villages, have neglected, or been ignorant of one of the most powerful of manures, poudrette or prepared night soil; and in consequence have suffered immense loss; but since the attention of men of science has been turned to the subject of the best methods of preparing and applying manures, it is probable the advantages to be derived from this new source will not longer be overlooked.

But whatever improvements or discoveries may be made, it seems clear that the farmer for manure must rely mainly on his stables and yards, and his study should be to render these the most efficient and available. One main object should be to prevent the escape of the liquid and volatile parts of the manure, as experience proves that these are the most active in exciting or supplying plants with food and thus accelerating their growth. The yards and the stables should be provided with litter, such as straw, hay, leaves, &c. with vegetable mold or muck, with the wash of roads or the overflowing of streams, in sufficient quantities to absorb and retain the urine and other liquid parts of the manure, and where these cannot be obtained, common earth or dry sand will be found of great utility in preventing the loss which must ensue where these parts of the manure are allowed to escape from the yard. If when the farmer cleans out his yards, he were to cover them with a hundred loads of vegetable or absorbent earth, he would find in the following year a greater number of loads of the most valuable manure, the greater part of which without such precaution would have been wholly lost.

It appears to be a well established rule, that manure to produce the most benefit, should be applied unfermented, and the decomposition take place in the earth. That rotted manure may afford at times more benfit to a particular crop, or that it may not be more conveniently applied to some crops, is not denied; but as a general and reasonable rule it may be asserted that manure should be rotted in the ground where it is wanted. Some crops are rarely injured by any quantity that can be given them, as corn, potatoes, and roots generally; of course such should have the advantage of the first process of decomposition in the manure, while its after effect is reserved for the grains and grasses. Heavy manuring of the grains, especially the spring ones, is more apt to produce lodged straw, than full berry, a result rarely felt when it is applied first to hoed crops, and the first fermentation has passed away.

Is every thing Right?

This is a question which every farmer should put to himself as he commences his labors of the field; for if there is a defect in the beginning, it is possible he may labor on through the whole season to little or no good effect.

It is essential to success in farming that there should be a plan; and equally so, that the plan should be a good one. Farming at random is seldom profitable. Every thing should be done by system,—the division and arrangement of the fields; the rotation of the crops; the adaptation of the culture and the crops to the soil; all should be the result of well digested plans, and these plans should be right at first or all will continue to go wrong.

Are your farming tools all in order?—and are they all of good quality? Dont imagine that you are going to save any thing in the end, by using wornout, ill-constructed implements of husbandry. A good plough, harrow, hoe, or scythe, will pay for themselves in a season by goodness and ease of working, over a clumsy inferior article. Are all these things right?

Are the seeds you are using clean, and of the best varieties? Always use the best seed to be had. Tolerable crops have been raised from inferior seed; but in this as in every thing else, nature is usually true to herself; and perfection can only be expected to result from perfection. If you sow chess, and charlock, and oats, and cockle, with your wheat, dont complain if you reap them at harvest. Are all things right here?

How are you fences? None of our business, some may reply; but it will be the business of your animals, and those of your neighbors to examine them thoroughly before the summer comes round; and if not right they will be sure to find it out, and the report will be accordingly. If any wall has fallen down let it be carefully replaced; if rails have been blown off by the winter wind, see they are all laid in their place; have stakes been frozen out, drive them over; and remember that most of the neighborhood hard feeling that exists might be prevented by a few hours examination and repair of outside fences. Look to it then that these are right.

Have you made proper provision for the moral and intellectual culture of yourself and family? It is all im-

portant that every thing should be right on this point, for on no one would a mistake be so fatal as on this. Newspapers, books, schools, and the religious institutions of society, should be at command and enjoyed; for indolence and inaction is as fatal to the mind as the body, and without sound morals, and general knowledge, no man can be adequately prepared to act his part in a free country and popular government like ours. Be careful that all is right here; and begrudge not the trifling expences the attainment of such good may require.

Mr. Colman's Report—Second notice.

Wheat stands next among the enumerated products of Essex county. Some fine yields of spring wheat were obtained in that county the past year; 57 bushels from 2 acres; 32½ from one acre; and 20, 24, and 25 bushels per acre in other instances. It is still however regarded as an uncertain crop; but we cannot doubt that in Essex as well as in other parts of Mass. where a similar feeling respecting wheat exists, the bounty offered for its production will ensure many handsome and profitable crops. Mr. Colman says—"Some portion of lime in the soil is deemed essential to its success; soils containing only one hundreth per cent. of lime are found capable of bearing wheat." We imagine a greater quantity is necessary to insure a plump good grain; and the farmers of the south part of this state and the north part of Penn. find the addition of lime indispensible to a good wheat crop, though analysis shows their soils to contain from one to two per cent of that mineral. We do not question but that the application of lime will materially benefit New England soils, and render nearly certain their wheat crop.

There has been no general blight of the wheat crop in G. Britain since 1806, but it is of too common occurrence in this country. Mr. Colman remarks,—"of two contiguous fields of wheat which I visited this season, one was severely blighted, the other sound and perfect. The only difference in the management of the two fields was that one of the farmers, during the continuance of the heavy dews and foggy weather, which occurred while the wheat was in flower, was careful every morning to sweep the dew from his wheat by passing a rope over it." This process has been practiced in Europe with success. It is performed by two men holding a long rope between them, and as they pass through the field drawing it over the wheat.

Of the wheat worm, Mr. Colman thnks there is reason to *hope* that fresh slacked lime strewed over the wheat when beginning to blossom, at the rate of a bushel to the acre will prove a preventive; and adduces one or two cases in which it was effectual. It should certainly be tried where danger is apprehended, and can produce no injury in any case. Mr. Colman states "the average product of wheat in Great Britain at 18 bushels per acre; in New-York 23; and in Virginia 7 to 9 bushels." He adds, "the wheat insect or worm has been known in Great Britain since 1828, but the cultivation has not for that reason been abandoned or lessened.

Of Rye but little is grown in Essex, though great crops are sometimes obtained, 70 bushels in one instance being cut from 1 1-4 acre of land. The general impression however is, that as much wheat as rye can be grown from an acre, and that it is as certain a crop.

Considerable Barley is grown as it is a profitable crop; and the average yield is from 25 to 30 bushels per acre. "For fattening swine, it is considered by many good farmers, of equal value, pound for pound, with Indian corn. To horses it is injurious." In connection with barley Mr. Colman states one remarkable fact;—"some few years since owing to the importation of some barley from Holland by a brewer of Newburyport, an insect was introduced which for several years destroyed the crops. The cultivation was suspended for a time, and the insect has disappeared." There can be little doubt, we think that the wheat worm is of foreign origin, and when imported seeds of any kind are used for sowing, they should be brined and limed, to guard against such results.

The Potato is cultivated extensively for market, and the crops repoted range from 150 to 400 bushels per acre. "It is the custom of one farmer to cut the seed end from his potatoes in the winter at his leisure, for planting, and use the other part for his swine. In this way a considerable saving is made. One farmer has raised three crops of potatoes from the same tubers, by plucking the shoots and planting them; and availing himself of a hot bed to forward the growth. All farmers agree that the seed should be large and fair."

Onions are much cultivated, and are a profitable crop. 400 bushels an acre may be considered a fair crop. Much of the labor is performed by women, both here and at Weathersfield in Conn. and with a good crop 100 dollars is not an uncommon result for a woman's summer labor in the onion field. In connection with this subject Mr. Colman makes the following remarks which strike us as very just:

"We should be sorry to see women in our country, subjected to the severe and degrading services and toils, to which the wives and daughters of the agricultural laborers of the old world are accustomed. But exemption from all necessity of bodily exertion, is usually a curse, not a blessing; and many of the lighter kinds of agricultural labor would be as proper for women as for men, did not custom forbid it, a custom of very questionable utility. Rather than engage in this many of our young women quit their parental homes, and prefer passing months and even years in heated rooms, amid the dust, and confinement, and deafening din of machinery, to the light, but cheerful and invigorating labors of gardening and agriculture, in the pure and bracing air, and the green and open fields. The culture of silk promises to afford a healthful and profitable occupation for female labor."

The roots, such as Ruta Baga, Mangold Wurtzel, carrots, beets, and cabbages are cultivated to considerable extent; and that of the former particularly seems to be increasing. We copy from the Reports, the greatest amount of each of the foregoing articles known to have been raised per acre in the county.

Of wheat, 32 bushels to the acre; of Indian Corn, 117 1-4 bushels; of Barley, 54 bushels; of Rye, 56 bushels; of Oats, 1000 bushels on 20 acres; of potatoes, 518½ bushels; of Carrots, 900 bushels; of Mangold wurtzel, 1340 bushels at 56 lb. to bushel; of Beets, 783 bushels; of Ruta Baga, 903 bushels; of English turneps, 814 bushels; of Onions, 651 bushels; from one acre of reclaimed meadow 4½ tons of English hay were weighed and sold; from six acres more than 29 tons have been made and weighed of good English hay in a season; 600 dollars worth of winter squashes were sold from two acres of land; and the products of an acre and a half of garden, amounted to $363,67. We notice these items to show that in good crops, New England is not so far behind the west as is generally supposed; and as evidence that capital and skill applied to the culture of the earth rarely fails in any place of its appropriate reward.

Be not given to Change.

Nothing is perhaps more common than to see men, farmers particularly, go on year after year apparently without any definite object in view; changing their plans and purposes, as accident or caprice may dictate, and then wondering that they are not successful in their business. Now labor, unless directed to some definite purpose, is usually of very little importance; and a man may, so far as the bettering of his condition is concerned, as well be idle, as to labor and toil without end or aim. No man is called to act upon a well digested and carefully arranged plan, more than the farmer, and none will find the balance of profit or loss more certainly corresponding to their course in this respect than he.

To mark out and pursue a systemized course, requires theoretical and experimental knowledge; a careful inquiry into the relation between cause and effect in farming; an accurate estimation of the capabilities of the farm, its natural soils, and the facilities for changing them if necessary; the markets at command; and an impartial survey of the future, so far as man is able to penetrate and weigh its probabilities. When this is once done, and a course of farming entered upon, it should be pursued until the result shall be made clear, and its ultimate success or failure demonstrated.

Some farms are adapted to grain, and by a rotation of crops can be kept almost constantly under the plough, and annually productive. Some combine the growing of grain with the facilities for raising stock, and their management will of course partake more of the nature of mixed husbandry. Others, though by care and skill they can be made to produce grain, are not naturally in a state suitable for its cultivation, and are found by experience better adapted to the dairyman or the wool-grower. All these and many other considerations should have their influence in determining the general course of farming, and the advantages and disadvantages carefully weighed.

There is scarcely a course of farming determined upon, planned by ordinary skill, and followed by industry and perseverance, that will not remunerate the tiller of the soil handsomely; it is the shifting from one course to another; the abandonment of cattle for grain, grain for sheep, and perhaps both again for cattle, that does so much mischief among farmers. All farming pursuits fluctuate more or less; and so long as the average rate of prices for a number of years show a handsome rate of profit, there is little reason for despondency or change, at any temporary depression of that particular interest.

There is a too general disposition shown among farmers, when, owing to causes necessarily accidental or temporary in themselves, one branch of farming happens to be less profitable for a single year or two, for all, or as many as are able, to quit the depressed business, and not unfrequently at considerable sacrifices, commence with that which at the moment is more productive. A little reflection would show them, that this general embarkation of men and means in the new pursuit, would have a direct tendency to reduce it at once to the condition of the one they had left, while that will rise in proportion as the other sinks.

We have for many years been attentive observers of this up and down business of prices; and learned some valuable lessons on the subject, from our own experience; and we are convinced that the chances of success in the long run, are altogether in favor of the man who carries out a well digested plan, even if in some years he finds his profits very small, over him who changes his business at every change of price, in the hope of more immediate and greater profits. Observation shows that the last is always in pursuit, but always a little behind the highest prices; the former is always in advance, and in a situation to command the highest prices, whenever in the usual fluctuations of events they occur. No one can change from cattle to grain, or from grain to sheep, without some loss in time or a large expenditure of capital; and in a majority of cases when his purpose is gained, he finds he has mistaken the true source of profit, and is ready to change business again.

We have been led to these remarks by the excellent paper of our correspondent 'South-Hill,' on the wool-growing business; a subject with which he is evidently familiar, and is entitled therefore to speak with confidence. Fortified as his positions are by authentic documents, they show most conclusively the error of those who are for repeating the barbarous proceedings of a few years since, and reducing our flocks by an annual decimating process. At the present moment grain and sheep are a little in the shade, and cattle are at the top of the wheel. When good working oxen will fetch from $80, to $120, a pair, it does not prove that there is too much wheat or too many sheep, but that the number of horned cattle is too small to supply the demand. It will not do to say that we cannot raise as much wheat as we now do, and at the same time keep what cattle and sheep the country requires. Such an assertion would be an entire mistake. The fault is in our mode of farming. If every farmer who owns 100 acres of land were to raise only two acres of turneps annually, he might furnish a yoke of oxen for sale every other year, keep as many sheep and other stock, and in all probability raise more wheat than he now does.

Temporary elevations or depressions in prices therefore furnish no good reason for vascillating and uncertain courses in farming. The people of the United States, farmers and all, have been breathing exhilerating gas, and the least indication of a return to the sober realities and *prices* of life is looked at with loathing and pain.

Profit does not so much depend on the price of a single article as on the relative prices of all. We have seen farmers thrive when wheat was at one dollar, sheep at eight or ten shillings, cattle at fifty dollars, and cows at fourteen or sixteen; and we shall see them do so again, were the prices of other things to correspond as they most assuredly would do. At the present moment the prosperity of the north of Germany is considered greater than it was ever before known, and the vast quantities of grain brought into our markets, and wool into those of England, at prices in many instances far below those we have named, show that if at times prices may reach a low ebb, there is no reason for despondency, no cause for deserting our country, no necessity of 'being given to change.'

SWINE.

A subscriber at St. Catharines, U. C. wishes to know "where either of the following breed of hogs can be procured—Barnitz, Norfolk Thin Rind, McKay and Bedford."

The Barnitz breed referred to, is evidently what is called the *Grass breed* in the North, and though very valuable when compared with the common swine of the country, has been exceeded by some of the later crosses and varieties, and we know of no place where the pure blood could be obtained, unless near Baltimore, where it received its name, and was highly esteemed.

The Norfolk Thin Rinds, were imported from England some eight or nine years since, but as a breed, have not succeeded very well in the country. They possess some excellent qualities, however, and in the vicinity of Baltimore they have left an evident impress on the swine of the region. We have seen no notice of them for some time, but think it probable they might be obtained, were it desirable, of any of the extensive farmers near Baltimore.

The celebrated McKay breed, originated in this country, we believe in Massachusetts, and has been kept there particularly in the middle and eastern counties in considerable purity, and may there be had without difficulty.

The Bedford or Woburn breed, has maintained a decided rivalry in the Brighton and Worcester shows, with the McKay swine, and each have had their strenuous advocates. The Bedfords and the McKays are now so blended by crossings and intermixtures, that the original traits are hardly discernible; but the best blood of each of these varieties, at the north, must be sought near Boston, and at the south, near Baltimore.

A formidable rival, as to swinish excellence, has arisen in the eastern part of Massachusetts within a short time, under the name of the Byfield breed, and has been widely scattered in this country, and even in England. It is probably a cross of some of the above named kinds with others. The following description we give from Mr. Colman's late Agricultural Report of Essex:

"Essex county may claim the honor of having produced the most important improvement in swine that has ever been made in this country. A farmer in Byfield, found accidentally in the market a pig of remarkable appearance, and this laid with him the foundation of the breed known as the Byfield breed. They have by some been considered too short, and not sufficiently heavy.—They come to maturity early; are quiet and docile in their dispositions, and are fattened at less expense than most others. They are easily made to weigh 300 lbs. at fifteen or eighteen months old. The stock has been crossed till it is now impossible to find it pure. We give the weight of seven of these pigs killed the past autumn, (1837,) approaching perhaps as near the original stock as any that can be found. 397 lbs., 396, 366, 412, 418, 520. Sold for $345. These pigs were from 15 to 18 months old."

We here add from the same Report an instance of extraordinary gain in a swine:

"A farmer in Newberry stated to me, that he purchased a hog in October, weighing 60 lbs. and killed him the ensuing March, weighing 600 lbs. The kind of feed was not stated."

The favorite breeds of swine at present, in this part of the country, we believe to be the Chinese, pure or crossed, and of which the best kinds may be had of Mr. Allen, near Buffalo; (see advertisement in Gen. Far.) and the Berkshire breed, an excellent kind, both as regards size, quality, and aptitude to fatten, and of which the best kinds may be obtained of Mr. Allen, Buffalo, or Mr. Bement, near Albany.

We may here add, that by not paying attention to their breeds of swine, there is an immense waste, both of food and labor, in the manufacture of pork. The same amount of food, will make, when fed to either of the best varieties named above, one-third more pork, and that of far better quality, than when fed to the ordinary long-legged, thin, squealing animals, that are found in the generality of our farmer's yards. The man who introduces into any farming community a good breed of pigs, is adding hundreds, if not thousands, of dollars annually to the available industry of the vicinity, and should be considered as a benefactor accordingly.

Meteorology for March and April.

March.—Average of the thermometer at 9 o'clock, 31°—at 2 o'clock 40°. Lowest temperature on the 1st, 8° above zero. Highest on the 23d, 65°. Range for the month, 57°. Variation on 19th, 32°. Number of clear days, 20. Variable 1. Cloudy 10. Number of snowy days 5. Rain 4 days. Fall of snow 6 inches.

April.—Average of the thermometer at 9 o'clock, 29°—at 2 o'clock, 39°. Lowest temperature on the 16th, 12° above zero. At sunrise only 10° above. Highest on the 22d, 55°. Range for the month, 43°. Number of clear days 11. Variable 7. Cloudy 12. Number of days on which it snowed, 10. Days on which it rained, 5.

The temperature of March was rather higher than usual; but that for April has been much lower; and the weather, as indicated by the number of snowy and rainy days, has been of the most forbidding kind. On tenacious soils, ploughing was impracticable, unless carried on to the manifest injury of the land, and consequently much of the sowing of spring grains usually performed in April must be thrown into May. Winter sown wheat appears very well; better than for two or three years past, and far better than the open and freezing weather of the winter and spring would have indicated. All vegetation—grass, trees, both in leafing and blossoming, are unusually backward. Ten days of warm weather would hardly bring them up to the average standard. The severe weather of the past winters has nearly destroyed our peach trees, and for fruit we count very little upon them in this region. The *buds* of other fruits promise well; what the *blossoms* will do we shall know hereafter. W. G.

Otisco, May 9, 1838.

The Geological Reports.

We have been kindly furnished by a friend in Pennsylvania with Professor *Henry D. Rogers'* Geological Report to the Legislature of that State. It is the most luminous document of the kind that we have ever read. During the last season, he has chiefly confined his examinations to the coal district east of the Susquehanna river,—a tract through which the writer of this article has often traveled on various routes, not unobservant of its rocks; and the dislocation of the strata, so puzzling to the student, are satisfactorily illustrated and explained.

Beginning at the Primitive Rocks of the South Mountain, which bounds the great limestone valley of Easton and Reading on the southeast side, Prof. R. enumerates XIII distinct overlying formations; and after having ascertained their thickness by actual admeasurement with proper instruments, he concludes that "the absolute depth of this enormous group of strata, cannot be less than *forty thousand feet*," or more than seven miles and a half. Yet the effect of primeval earthquakes has been to bring up portions of all these strata to the surface, including the limestone and iron-ore, which without these convulsions would have been buried forever beyond the reach of the human race.

The last, or uppermost of these Formations, is the one which contains the Coal; and yet "these tracts," says Prof. R. "are long irregular basins which have assumed their form from the *elevation* on all sides of them, of the *underlying* rocks of the country;" so that though these basins have suffered great dislocations, yet the "violent upheaving action of the strata," was on the *outside*.

The red shale and red sandstone of this region, which occupies the southern shore of Lake Ontario, is a part of Prof. R.'s Vth Formation, found at the northern base of the Blue Mountain in Pennsylvania; and though the dip of the strata there, is not uniform, with us it assumes great regularity in a southern direction. An immense basin under the Coal Fields, may therefore be conceived,—filled up, however, by *seven* different groups of rock, estimated at more than 19,000 feet in thickness; or in other words, we who stand on the upper surface of the red sandstone, are *geologically* 19,000 feet below the coal region.

In speaking of Formation No. VIII, which includes the slate found on the shores of all our parallel lakes, from Otisco to Lake Erie,—Prof. R. makes the following remarks; and we hope that our readers will not forget them, as much labor in different places, has been lost in exploring for coal:

"Some of the layers of this rock, from a resemblance in their color to the shales of our coal measures, and from their containing at times sufficient carbonaceous matter to cause their partial ignition when highly heated—are very frequently mistaken by those who are ignorant of the true relations of our coal-bearing rocks, for unequivocal indications of anthracite or bituminous coal. These delusive appearances occur at the Big Bend of the Susquehanna.

"No formation of our whole series, has seduced so great a number of persons into abortive explorations after coal. It may be useful therefore to embrace this occasion to state, that I feel satisfied that this Formation, wide as is its range, *contains no coal in any part of the United States*, and that in Pennsylvania, it occurs by calculation at a depth rarely less than 8,000 feet below the lowest coal seams of any of our coal regions."

Through the Blue Mountain are numerous passages for the principal streams; and how rocks of such great hardness could be penetrated so as to allow a free exit, has been a curious subject for speculation. Jefferson, in his Notes on Virginia, used these words:

"You stand on a very high point of land. On your right comes the Shenandoah, having ranged along the foot of the mountain one hundred miles to seek a vent. On your left approaches the Potomac, also in quest of a passage. In the moment of their junction, they rush together against the mountain, rend it asunder, and pass off to the sea."

The beauty and sublimity of this sketch may apologise for its departure from the laws of Hydrodynamics; but water never breaks through rock-ribbed mountains by percussion; and we turn with pleasure to a suggestion of the cause of those breaches, in the Report, namely, cross or diagonal fractures by primeval earthquakes, after the mountain was upheaved. We copy the words:

"In all the three instances here adduced, of great cross fractures affecting the Pottsville basin, the strata to the *eastward* of the dislocation are thrust forward towards the *north*; and such, though probably liable to many exceptions, would seem to be the general rule in this southern coal region. The numerous gaps and breaks in the line of the Blue Mountain or Kittatinny, exhibit very generally a corresponding law.

"This is shown by measurements at the wide gap of the Susquehanna, above Harrisburgh, and is manifest to the eye in the bold notch called the Water Gap of the Delaware, where the strata that rise into the summit of the mountain on the New-Jersey side of the river, are thrown several hundred feet to the north of those in a corresponding position in Pennsylvania.* I conceive these transverse dislocations to pervade all the great ridges and valleys of the Appalachian region, and to be a primary cause of most, if not all, of those deep notches which are known by the name of Water Gaps, and which cleave so many of our high mountain ridges to their very bases."

On one point we suspect the learned Professor is in error. He considers the limestone at the Falls of Niagara as a subordinate of his VIIIth Formation, and not a continuation of the "Blue Argillaceous Limestone" which constitutes his VIth Formation. We cannot conjecture why he supposes that his VIth and VIIth Formations are both *wanting* in this district; nor why a subor-

* We well remember our surprise, after having passed downward through this great gap, to find the mountain on different sides of the river, not in the same line.

dinate stratum has expanded and thickened into our great limestone deposit; for if its dip on the Niagara River be 50 feet to the mile, and the distance from the Lewiston mountain on a right line to Lake Erie, be 20 miles, its thickness would be a thousand feet. We must leave the question of identity, however, to be determined hereafter by actual inspection; and also whether *a coarse sandstone* which occurs high in the series of our limestone strata, if not above them, is, or is not, his VIIth Formation. It is briefly described in the Report as follows:—"*A coarse and rather loosely cemented white and yellowish sandstone, with cavities showing the form of shells* and other organic remains." The words in italics accurately apply to a stratum occurring about a mile north of the village of Union Springs in Cayuga county, and in other places to the northeast—with only this exception: the cavities are confined to the exposed surface. We believe all the plaster of this region belongs to strata which *underlie* this sandstone; and if search be made for this valuable mineral in Pennsylvania, it will be of some importance to know whether the exploration should be *above* or *below* the VIIth Formation.

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Since writing the above, we have examined Professor *Vanuxem's* Report, and from it make the following extract:

"*Reposing upon the limestone* at Oriskany Falls, or Casety Hollow, *there is a white sandstone*, not seen elsewhere in the two counties. From some fragments which I found last year to the west, it is the same rock which forms the locks at Lyons, as I was told. The sandstone is divided into two or three layers; the whole mass about 20 feet thick. *Parts very friable, readily crumbling into sand.* It is used at the Glass Works at Vernon. *The fossils of this rock are peculiar to it*, being very large species of the genus *Orthis* and *Delthyris*."

We think there can scarcely be a doubt that this stratum is the same as that which occurs in Cayuga county; and from its containing fossils which are "*peculiar*" to it, we must infer that it is a distinct formation, having been deposited in a different period from the underlying and overlying rocks. The probability is therefore increased that this is Prof. R.'s VIIth Formation. J. T.

Enquiry:—Poudrette.

A 'subscriber' at Poughkeepsie wishes to know if the 'manufactory of Poudrette, has been commenced in New-York;—whether the company there proposed has been formed, or whether it has been given up.'

We do not know the present state of the enterprise for manufacturing this important manure, nor have we learned whether the company it was proposed to form last fall has been organized. The complete prostration of every interest, and nearly all enterprise, in that city for several months past may have had the effect of retarding the work, but we trust the project will not be abandoned, until a fair experiment shall be made of its practicability and utility in this country. Believing that by this process a decided nuisance may be converted into a substance of the greatest value, we hope to hear that companies in all our principal cities are formed for this manufacture, in this respect following the example of European cities, where the plan has been found so conducive to general cleanliness and health, and so beneficial to the farmer. Animalized Carbon;—Carbonized Humus;—and carbonaceous mineral powder, are coming into general use as fertilizing materials; and the last is sold in quantities that enables the farmer in the vicinity of populous districts to prepare his poudrette, at the very lowest rates. We cannot omit to mention a fact here most disgraceful to the farmers of this country, and which ought never again to occur;—we allude to the exportation of *bone dust*, and *bones*, from this country to England. While the foreign agricultural journals speak of this as a common occurrence, and the bones and bone dust from our cities go to enrich the fields of Europe, can it be a matter of wonder that we are dependant on their agriculturists for bread. Precisely in the degree that we allow such materials to leave us, we are impoverishing ourselves, and enriching others.

With regard to the broad cast clover sowing machine, we have no information beyond that in the article to which a 'subscriber' alludes, nor can we inform him where the machine, or a plan from which one could be constructed, can be obtained. A machine called Bennett's broad cast sowing machine, adapted particularly for sowing clover and grass seeds, though capable of being used for wheat, was used to some extent in the vicinity of Boston, and was for sale at the Agricultural warehouse in that city. It sowed eleven feet in width; could be regulated to any quantity of seed per acre; and cost twenty dollars.

We are more and more convinced of the propriety of the suggestion in Mr. Allen's Agricultural bill that rooms should be opened for the reception of all valuable implements in farming, where they could be obtained, or examined at pleasure. From the numerous inquiries directed to us on such subjects, and which we are always pleased to answer to the best of our knowledge, we should suppose that inventors and manufacturers of such implements, would find it to their advantage, to advertise their several articles in the farming journals of the country, far more extensively than is done at present.

Entomology, or History of Insects.

We know of few fields that present fairer objects of research to the student of nature; that promises a more ample reward to the qualified observer, or would be of more essential utility to the country, than the one that embraces the history and habits of our North American insects.—Some able observers have already been in the field, but their labors have been mostly desultory, and not directed with that definiteness of purpose that alone can render such investigations complete. Mr. Say accomplished much, but his premature death, has clouded all hopes that were once entertained from that source. The able assistant of our state geologists, Dr. De Kay, who has charge of the entomological department of the survey of the state, has, we are pleased to learn, entered upon the duties of his appointment with a zeal and industry, which, combined with his acknowledged ability, cannot fail of producing the happiest results. As farmers, we look with great anxiety for the reports of the eminent men engaged in this survey; and trust that no narrow, ill-timed policy will prevent the whole investigation from being concluded in the most able and complete manner.

Insects, in themselves considered, and as individuals, are insignificant, contemptible creatures; but Providence has endowed them with powers of procreation and destruction, that renders them truly formidable, and makes them the severest scourge and most powerful enemy the farmer is called to encounter. It is respecting these that knowledge is most essential; for without a previous acquaintance with their modes of existence and habits, all efforts to effect their destruction, or prevent their ravages, must be made at random and with uncertainty.

Take the wheat insect for instance, notwithstanding it causes an actual loss to the state of millions annually; how little is known with certainty respecting it. Observers are not agreed as to the insect itself, its class or its color. Some making it a bug, and others a fly; and it has been endowed with as many colors, at least, as can be found in the rainbow. Some maintain that the injury to the wheat is done by the fly itself, others assert that the worm produced by the fly is the devastator. The modes of prevention recommended, are as various as the notions of the proposers, and it is to be regretted that all the preventives urged, have been found wholly ineffectual. That the insect is a *fly*, there can be no doubt; and the fact, that the berry when in the milk is selected by the fly as a suitable niche for its egg, is conclusive proof that the young, or the worm, does actually feed on the kernel. We have opened kernels containing them, and in an ear of wheat where the worm is found, more or less of the kernels will be seen to be hollow and worthless. Last year we saw the fly, after the wheat harvest was safe, busy in depositing its eggs in barley, a few seeds of which had been dropped by accident, and sprung up late, and on the common quack or twitch grass they were not idle.

Two or three years since, we published a short paper, "The least of the Bugs," in the Farmer, on the bug that perforates the clover seed, and in that small enclosure finds a home and food for its young. A writer in a late number of the Cultivator, while he maintains our correctness as to the depredator on clover, asserts that the fungus called smut or horned rye, (*cerealia cornutum*,) is the product of the same insect, made by perforation of the rye kernel, and thus causing an irregular crystalization of the juices, and that he has found in such excrescences the insect, and observed its transformation. This is an important suggestion; since if the fungus of the rye, one of the most active of poisons, is caused by an insect, there is great reason to suppose that that of June grass, *poa pratensis*, and of other grasses, where it exists, springs from the same cause. The discovery of the cause of an evil is usually essential to its remedy; and believing as we do—we think on sufficient evidence—that the disease called hoof-ail, and which the present season has caused the loss of thousands of valuable animals, is occasioned by *ergot*, we think the attention of farmers should be directed to this subject more carefully than ever, that the conclusion may be proved or disproved.

The Aphides are another class of insects that occasion great loss and annoyance to the farmer, but of which very little is known with certainty respecting their manner of existence and habits. What is known, however, is sufficiently curious; and some of them form most entertaining and instructive subjects for microscopical examination. Without mouths, mostly destitute of wings, and with limited powers of locomotion, the manner in which they receive their food; spread to such distances; and multiply with such inconceivable rapidity, was long a subject of wonder and surprise; and even now, when better understood, scarcely loses any of its interest in the eye of the observer.

The turnep fly, *Halteres*, is another of the tribes that prey on the labors of man, and of which, notwithstanding they sometimes occasion the loss of millions of dollars by the destruction of that valuable crop, in England, little is known; and where it prevails, the most whimsical and ridiculous notions are entertained in regard to its appearance. We might extend this notice, and embrace the families, the larvae of which destroy corn and grasses from the root, and the caterpillars that despoil our orchards and groves of their foliage, but we have said enough to show the importance of this subject to the farmer, and prove that a knowledge of entomology is one of the most interesting branches of study that belong to the Natural Sciences.

Preserving Milk.

A foreign Journal states that some milk was lately exhibited in Liverpool from aboard a Swedish vessel, that was several months old, having made two voyages from Sweden to West Indies and back again, and remained perfectly sweet and fresh. The manner of preparing it is as follows. The bottles are made clean and sweet, and the milk is milked directly into them without the intervention of a pail. As fast as they are filled, they are closely corked, and the corks wired down as in bottling cider. The bottles are placed when filled in a boiler, a layer of straw and a layer of bottles until the boiler is full. Fill the boiler with cold water, kindle a fire and let it heat gradually; when it begins to boil withdraw the fire, and let tke bottles remain till cold. They must then be taken out, packed in hampers, with straw or saw dust, and stowed in the coolest part of the ship. The milk so exhibited was above 18 months old, and was of excellent quality. The perpetual motion of the sea, in time improves milk as much as it does Madeira; at least such seemed the result in this case.

It is evident that this discovery will be the most available at sea; but it has occured to us, that where bottles could be easily obtained, many families living in cities and villages who keep a cow, might, by preserving some in this way furnish themselves with a supply for the time a cow usually goes dry during the winter. In any event the experiment could cost but little, and we should be pleased to hear that it had been made in this country for such purposes.

COMMUNICATIONS.

CUTTING GRASS.

Mr. Tucker—With deference I beg leave to submit to you (and if you think proper) to your readers, a communication concerning the time of cutting grass. I saw in the Monthly Genesee Farmer for April, a query put forth by a Farmer, as to the best time to cut grass for hay, and I read your solution of the same with much pleasure. If in this communication I should differ from your opinion, or the opinion of your readers, I shall ever stand ready to be corrected. I think late mowing has many advantages over early mowing. In these remarks, I shall confine myself to clover and timothy grass, as these varieties are most used for hay in this country. First, as to cutting clover, I think the blossoms should be at least one-third of them seared, not ripe but partly brown. In this stage it will dry much sooner, and the blossoms, together with the stalk and leaf, will remain more fresh and bright than when cut before the blossoms begin to sear a little. In cutting clover when in full blossom, it is almost impossible to cure it so that it will not blacken in the mow. There is a great difference in the juice of the grass in the two different stages of growth. When in full blossom, the juice seems to be thin, and when the grass is cured it dries away very much and is light; but when the blossoms are partially seared, the juice becomes more thick and gummy, and the grass when dried does not lose so much in weight, and is not apt to sweat so as to blacken in the mow, but will remain bright; consequently the hay will be better and more nutritious. Second, as to cutting timothy grass, it will do to carry the extreme a little farther. As this is decidedly the best grass for hay that is grown in Western New-York, the most used, and the variety which bears the best price in market, I think a proper observation as to the best time for cutting would be highly important. The proper time to cut this grass, is when the heads become seared or brown from the top at least one-third down the head. At this time, the grass may be cut in the forenoon and taken in the same day without injury, if the weather is good. The grass, at this stage of maturity, will decrease much less in weight in the process of curing, than it will when cut in blossom. The juices will have become more solid, the hay will contain more gum, and consequently will be more nutritious. Every farmer knows, that in mowing early the gum never adheres to the edge of the scythe, let the weather be ever so dry; but when they have cut grass that was ripe, or nearly so, their scythes would gum on the edge so as to prevent the cut of the scythe. I have always considered the adhesion of gum to the edge of the scythe, a sure test as to the goodness of hay. The more gum, the better the hay will be. Cattle and horses like ripe hay the best, as well as ripe grain; at least mine do. I have had an opportunity of testing the value and goodness of hay when cut early, and when cut late, and I never had an ox or a horse that would eat early mowed hay if they could get ripe. I have often tried the experiment, by putting both kinds in the manger at once. The result has always been, that the ripe hay would be eaten up clean and the green hay left. I have heard farmers complain that their working cattle had lost their appetite in the spring, and I have had the satisfaction of convincing some of them, that their cattle had a first rate appetite for ripe hay. When I have been obliged to feed green hay, my cattle would never fill themselves. No matter how much I fed them, they would never eat enough to look plump; and I have had always to make up the deficiency in grain or roots. In all meadows where it is considered an object to grow timothy, and retain it from year to year, it will be found absolutely necessary to have the timothy shell a little from the ripest heads, so that some seed may fall on the ground. By this method you make your meadows much thicker at the bottom, keep June grass out, and grow all timothy as long as you please. By so doing, you will prevent your cattle from the hoof-ail; as it is allowed by many experienced farmers that June grass spurred will produce this disease. But if you mow early, you will leave no timothy seed on the ground, your meadows will become thin, and June grass will eventually run the timothy all out. The seed of the June grass fall sooner than any other grass in this country, and this, I think, is the reason that meadows are so full of June grass in this country.

As this is a very important subject for the consideration of farmers, I hope that the able and experienced writers for your paper will do this subject justice; at the same time I beg that you and your readers will make great allowance for this my first effort. Elba.

Elba, April 15, 1838.

The Proper Season to Cut Timber.

Mr. Tucker—I will suggest a few thoughts and facts, which have come under my observation, concerning the proper season of the year in which our building and fencing timber should be cut for profit and durability. Our ideas are derived, many times, from the tradition of others; and I perceive that the same powerful *tradition* that I have received of my father and aged friends, is abroad in the world, i. e. that timber, in order to be lasting, should be cut in the month of February; and in fact, so particular have I, and many others of my acquaintance been, that we have cut almost all our rail timber in that season of the year; and if we were under the necessity of cutting a little at any other time, we considered it a misfortune, and cut as little as possible, thinking that it would soon *rot*. But facts have proved to my satisfaction the contrary. I came into this country early in the spring of 1810, and commenced on the farm on which I now live, the first of April following. On Monday we cut an opening on which to build our shanty. On Tuesday we cut poles and built us a shanty, and myself and two others took our provisions to said shanty the next day, and commenced chopping. We cut our rail timber as we found it when chopping, supposing however that it would not last long, but we could do no better.' But to my great surprise, that timber has lasted beyond all calculation, being some of it sound yet; and in fact there were two poles taken from that shanty, (for we built another better one the same spring,) which happened to be saved and laid on the fence, about five inches in diameter, completely sound, yet one of them is a red elm, which lies on the fence to be seen now, and the other is a white ash, which I cut up into blocks and put under the corners of the fence when I moved it two or three years past. It cut as sound apparently as if it had not been more than four or five years since it was cut in the woods. It is twenty-eight years this present month since these *poles* were cut. Who can state and prove facts equal to these respecting timber that was cut in February? (You will remember that I published an account of the largest elder tree that has ever been given in the Farmer, it being 16½ feet high, 16 feet 4 inches horizontally through the top, and 2 feet 6 inches round the body 4 feet 6 inches from the ground.) I have observed, and am able to show, that those rails that I have cut and split in February rot soon, while those that I have ventured to cut in the spring or summer, when the bark would peel off, have remained heavy and sound much longer—traditions to the contrary notwithstanding. I, therefore, think that timber will last much longer, cut when the sap runs freely, especially if the bark is stripped off, because in this case all of the sap runs out, while that which is cut when the sap does not run, retains all of the sap, which hastens its *destruction*. Further, I think timber to be durable should by all means be cut when the bark will peel, and do not neglect to strip it off. Brother farmers, just try it, and then you will know for yourselves. Russel Weaver.

Cambria, Niagara Co., April 22, 1838.

Smut in Wheat.

Mr. Tucker—In conversation with an aged gentleman a few days since, he made the remark that he never raised or had a kernel of smut on his farm in his life. In answer to my inquiry as to how he had prevented it, he said that he had done nothing but to see that the bags in which he kept his seed, were thoroughly cleaned, so that no flour should be left sticking to them. If clean bags and clean seed will prevent smut, I think it a much cheaper preventive than brining and liming. Let our farmers try it.

North Boston, April 28, 1838. Elias Sprague.

Weight of Potatoes.

Mr. Tucker—I will give you the result of a little experiment I have just made on the comparative weights of four different kinds of Potatoes. Whether it will prove any thing in respect to the different degrees of nutriment they possess, I do not know, though it would be a very valuable piece of knowledge, and I believe has been attempted to be proved from the quantity of starch each contained. Being about to make a strong brine to pickle my seed wheat, I was told that to make it so that it would swim a potato, would be about the same as the common test of swimming an egg. It struck my fancy to try whether the different kinds varied in weight. I accordingly took two Early Kidney, two English Whites, two Nova Scotia Blues, and two Pink Eyes, and put them into my brine, having first washed them and examined that they were all perfectly sound. The Kidneys first rose, then as salt was added, the English Whites next, the Nova Scotia Blues, and lastly the Pink Eyes, which required a considerably stronger liquor to float them than either of the others. William Bache.

Wellsboro', Pa. May 3, 1838.

Experiment with Potatoes.

Mr. Tucker—In 1835, I tried an experiment by planting different sized potatoes, in order to satisfy myself what size and quantity in future would be profitable to plant. The result was as follows:

First row,	...1 large potato in a hill,	.....3 5-6 bush.
Second do.	...2..... "	.....5 1-8 "
Third do.	.....2 small. "	.....2 5-8 "
Fourth do.	...3... "	.....3 5-8 "
Fifth do.	.....4... "	.....3 1-2 "
Sixth do.	.....2 common size... "	.....4 1-4 "
Seventh do.	...3..... "	.....4 1-2 "

The above was not a precise test. The ground was ridged and the seven rows occupied about one ridge, therefore the first and last rows had not quite an equal chance; and the rows planted with the small potatoes were on the best ground. There was a material difference in quality as well as quantity; those raised from small potatoes were much the smallest; also where two or three larger potatoes were in a hill, the product was of inferior size. They were planted the 13th of June, on a stiff loam inclining to muck, with a clay subsoil, considerably worn and without manure. The seed was an early variety of flesh color, not over much given to tops, and were planted three and a half feet in the row each way.

Culture of Ruta Baga.

I have had some experience in raising ruta baga, and some information, such as I have learned, may be useful to those who are about to commence growing them. The first crop I planted was lost by not using seed enough, and the insects devoured them as soon as they were up. The second crop failed by being planted too late, (the 5th of July,) and not sufficiently covering the seed—a dry spell came on, and they did not start in time to amount to much. The way I now manage is as follows: I plough my ground as often as convenient, in order to destroy the weeds; manure it well before the last ploughing, and drag the surface smooth and mellow; then mark out in drills with a long (say 8 or 10 feet,) heavy (25 or 30 lbs.) chain; this makes a good drill, and clears away the lumps and stones; then sow with a tin box, with a hole in the bottom large enough to let a seed through readily, and not so large as to let out two abreast, by shaking it about once a foot over the drill, and cover with a common hay rake by drawing it across the drill about four inches each side. This process leaves nothing but fine dirt on the seed, and I can mark, sow and cover an acre in a day. About two and a half feet I judge a proper distance between rows. It leaves room to pass a plough or a cultivator, or as I use a light drag two feet wide with nine teeth, which on soddy, lumpy or stony land, I esteem bet-

ter than either. I think if planted two and a half feet the product will be as great as if nearer. Last summer I raised half an acre; the cost was as follows:—half a pound of seed, fitting the ground, manuring and sowing, three days; thinning and hoeing once, six days; gathering four days. I had two hundred bushels, worth twenty-five cents per bushel. There is a variety among us called the white Swedish, which is esteemed better for table use than the common ruta baga. They are raised in the same way, but are not as productive as the yellow Swedish.

ALPHEUS CALVERT.

Reading, May 5, 1838.

SOILS.

Loams are the most desirable of all soils to occupy. They are friable; can in general be cultivated at almost any season of the year; are ploughed with greater facility and less strength than clay; bear better the vicissitudes of the season; and seldom require any change in the rotation adopted. Above all, they are peculiarly well adapted for the convertible husbandry; for they can be altered not only without injury, but generally with benefit, from grass to tillage, and from tillage to grass. They should not, however, be kept in tillage too long, nor while they are in cultivation, should two white crops be taken in succession.

Loams are of four sorts; 1. Sandy; 2. Gravelly; 3. Clayey; and, 4. Peaty.

1. A sandy soil and a sandy loam, are easily distinguished. A sandy soil is always loose and crumbling, and never gets into a clod, even in the driest weather; whereas a sandy loam, owing to the clay that is mixed with it, retains a degree of adhesion or cloddiness, after wetness or drouth, and will not suddenly crumble down, with the application of machinery for that purpose.

A mellow, rich, crumbling sandy loam, adhesive enough to fear no drouth, and friable enough to strain off superfluous moisture, if incumbent on a sound subsoil, is the most profitable of all soils, being managed with much less expense than any other soil, and raising with advantage, every species of crop that the climate will admit of.

2. Gravelly loams, when warm, sound and dry, or free from springs, are useful soils, more especially in wet seasons and climates.

3. A clayey or stiff loam, is nearly allied to brick earth. Though the soil might have originally been poor, cold, and hungry, yet if it be well drained, according to the Essex system, and highly manured, it will yield great crops. It is found well adapted for the dairy in Cheshire.

4. Peat, in some of its varieties, may likewise be converted by culture, into a species of black soft loam, and in that state, it becomes highly fertile and productive.

Loams will produce hemp and flax, in the greatest perfection and abundance, besides the other crops usually cultivated in this country; and in rich loams, where the substance is both dry and open, lucern might be more generally grown than it is, in preference to other grasses.

Before the subject of soils is dismissed, there are some miscellaneous particulars which merit attention; 1. The means of ascertaining their composition; 2. The nature of mould so essential for their fertility; 3. Their color; 4. The importance of cultivating good soil; and, 5. The general principles on which their improvement may be effected.

1. That the most efficient methods for improving soils may be adopted, it is necessary that their composition should be known. A distinguished philosopher has suggested a plan for that purpose, which can easily be carried into effect, by any person at all conversant in chemical researches. But the generality of farmers have not the means of entering into such researches; yet they are able, by observation and experience, to discover the most important deficiencies of the soil they cultivate. This may be effected, by comparing their own soils with each other, and with the most fertile in their immediate neighborhood. The great object they ought to keep in view is, to render a soil capable of receiving and retaining such a due quantity of moisture, as my be sufficient to nourish the vegetables that grow in it, and to absorb or to throw off, that superfluous water which would prove injurious.

2. Mould, which contains a mixture of animal and vegetable remains, particularly from putrefaction, is an essential ingredient in all fertile soils. It arises from the decomposition of the roots and leaves of vegetables on grass land, and the stubble and roots of grain crops, on arable. This process on grass lands is very slow; for it is calculated that it proceeds at the rate of only one inch in a century. Considerable accumulations of this mould, are likewise produced from the leaves of trees, amassed for a number of years, and rotted on the surface. When in addition to vegetable, there are animal remains, in a state of decomposition, the soil is distinguished for its fertility.

3. It is of essential consequence, when the surface is bare and exposed to the rays of the sun, that the color of the soil should be such, as to attract and absorb the greatest heat from the sun and the atmosphere, more especially in spring.

Soils are of various colors; the principal are white, black, and red.

White stiff clays are heated with difficulty, and being usually very moist, they retain their heat only for a short time.

A black soil, containing much vegetable matter is most easily heated by the sun and air. Its temperature has increased from 65 to 88 by exposure to sunshine for an hour. A chalky soil, under the same circumstances, was heated only to 69°. In the shade, however, the black mould lost its heat more rapidly.

The red color in soils, is owing to iron in various combinations. It is favorable or adverse to fertility, according to the nature of the combination. That which approaches nearest to the metallic state, is considered by some the most favorable.

4. It has been justly remarked, that too much can hardly be paid for a good soil, and that even a low rent will not make a poor one profitable. The labor of cultivating a rich and a poor soil, is nearly the same; while the latter requires more manure, and consequently is more expensive. Poor soils, at the same time, may have such a command of lasting manures, or even of temporary sorts, like sea weed, as may render them profitable to cultivate.

5. There are various modes of improving soils.

Soils with acids or salts of iron, may be ameliorated by the application of lime, or chalk. The sulphate of iron is thus converted into a manure.

If there be an excess of calcareous matter in the soil, as in chalky soils, it may be improved by the application of sand, or clay, or earthly substances.

Soils too abundant in sand, are benefitted by the use of clay, or marl, or vegetable matter.

A deficiency of vegetable or animal matter must be supplied by manure.

An excess of vegetable matter is to be removed by burning, or to be remedied by the application of earthy materials. The substances necessary for improving soils, are seldom far distant. Coarse sand is often found immediately upon chalk, and perhaps always under it, while beds of sand and gravel are commonly below clay, and clay and marl generally below sand.

The labor and expense of improving the texture or constitution of the soil, it has been justly observed, are amply repaid by the great permanent advantages they produce. Less manure is afterwards required, the future fertility of the soil is ensured, and capital, thus expended, secures for ever the productiveness, and consequently the value of the land.—*New England Farmer.*

Beet Sugar.

We have great pleasure in announcing to the agricultural public an important discovery, made by a gentleman in this vicinity, in the manufacture of sugar from Beets. It has been the result of ten years study and experiment. Samples of the sugar made by this process, finely crystallised and of as good a quality as the common Havana white sugar, and disinfected as far as we could perceive of any of the earthy taste, which has been so strongly objected to in beet sugar, we have seen; and we have seen so much of the process and such results of the process as to leave little doubts of its success.

The advantages promised by this mode are the following:

1. It is adapted to obtain from the raw material eight or ten per cent. of sugar—or as much as it contains.

2. The raw material is put in a state of preservation so that the sugar can be manufactured at any season of the year, at the convenience of the Farmer.

3. The process is simple and easily understood.

4. It requires no expensive machinery, and though improved machinery would facilitate the process, yet it can be made to advantage with no other machinery than what is to be found in every farmer's kitchen.

5. At present prices of labor and sugar there is reason to believe that every farmer can raise and manufacture his own sugar at a very small expense compared with what the purchase of sugar from the stores now costs him.

A patent for this invention and discovery is now in the process of being procured; and it is confidently expected that rights to manufacture will be for sale at such a rate as to put it in the power of every industrious farmer to make his own sugar. The gentleman, who has applied for the patent, promises that the rights shall be for sale seasonably this summer. We express the hope therefore that the farmers in Massachusetts will be ready to take advantage of it by cultivating largely of the beet. In any event the value of the root for feeding stock will amply repay, if a good crop is obtained, the expenses of cultivation. We understand that sugar beet seed of the best quality is to be obtained at the New England Farmer Office, No. 52 North Market street; and we presume at other seed stores in the city.

H. C.

April 30, 1838. *New England Farmer.*

Agricultural Improvement.

"*Speed the Plough.*"

MR. HOLMES:—The subject of saving and making manure may be mentioned. This is a subject often discussed in Agricultural newspapers; yet farmers in general make little or no exertions to increase their manure by artificial means. Every farmer who reads Agricultural books or newspapers, has information suffcient to guide him in the lucrative business of increasing his manure.

If every farmer in our state would drive his business before him, and so economize time that one week, at least, every year, shall be spent in collecting materials for the compost heap or the barn yard, it would have the effect of doubling our agricultural products. What farmer is there in Maine, who is unwilling to spend a week with his team, if by so doing he can double the quantity of his manure? The materials for making manure in our state are every where abundant. The farmer who cannot get muck, may haul loam into his barn yard. By so doing he may save what is annually lost by drenching rains, and by evaporation. No farmer should rest satisfied after he has improved all the means within his reach for acculating manure. There are other important methods of increasing the fertility of the soil which should not be neglected.

A proper rotation of crops is of immense importance. Land that is kept for a great length of time in tillage, will not yield great crops, however highly manured. Land that is kept in grass for a great number of years, will at length yield a light crop. To continue the same crop upon the same piece of land for a great number of years without intermission, is at best *miserable husbandry*. Lord Kames was of opinion that no branch of husbandry required greater skill and sagacity than a proper rotation of crops. It would be a task to lay down precise rules for rotation of crops; but one fact is certain, that the farmer who does not pay a strict attention to this subject can never meet with great success.

Meliorating crops should be cultivated with a view to the improvement of the soil,—such as clover, buckwheat, and the like. It is a capital property in a farmer, never to be *stingy* in the use of grass seed. "There is that withholdeth more than is meet, which tendeth to poverty."

The best English farmers well understand this ancient motto, for it is said they never sow less than 15 or 20 lbs. of grass seed to the acre. It has been proved by experiments, that the roots and stubble of an acre of clover, yielding one ton of hay to the acre, afford *twelve tons* of vegetable manure, when turned under by the plough.—Now suppose the farmer has a field that will yield three tons of hay per acre. Let the roots and stubble of this field be turned under by the plough, and the accession of fertility to the soils must be exceedingly great.

Thorough plonghing may be mentioned as a means of improving the soil. The celebrated I. Hill was of opinion that frequent ploughing was a cheaper method of increasing the fertility of land than manuring. That an exhausted field can be made fertile by frequent ploughing alone, without manure, may perhaps be doubted by some; but one fact is certain, that a soil, however well manured, can never be very highly productive, unless it is well pulverized, and to a good depth. It has been supposed that by frequent ploughing, the soil derives fertility from the atmosphere; but if we suppose this theory to be wholly unfounded in fact, still the agriculturist who thoroughly pulverizes his soil by frequent ploughing will receive an ample remuneration for his labor, inasmuch as a well ploughed soil affords a free passage to tho roots of all kinds of vegetables. A farmer, a number of years ago, let to an Englishman a piece of poor "pine plain" land, which was thought not worth cultivation, giving him all he could raise upon the same. The Englishman ploughed the field nine times successively. He then stated that he would still continue ploughing, but he was apprehensive the grain might grow too rank. The farmer offered to guarantee no damage; the Englishman, however, sowed his grain, and his crop was immense—giving him a very ample reward for his labor and that of his team; besides conferring a great benefit upon the farmer, by improving his field.

The removing of stumps, stones, &c. is of immense importance to the farmer who is desirous of thoroughly cultivating his land. Let one single acre in a year (if a farmer cannot afford time or capital to do more) be cleared of all obstructions to the plough. Let stumps and roots be entirely eradicated, and let all stones be removed; in some cases blasting should be resorted to, where stones are too large to be removed with crowbars. Stones should not be piled in heaps, but they should be either used for stone wall or carted to some waste place. The farmer should not rest satisfied till he has so removed the stones that the plough may find no obstructions; and when the ground very much abounds with stones, they should be removed a number of years progressively. When the plough finds no obstructions, then, indeed, there will be not only profit but pleasure in agriculture.

Pasturing land is another method of improving the fertility of the soil. Dr. Dean says that land that is con-

stantly used for pasture will be enriched. Although land may constantly acquire fertility from being pastured, yet we find that many old pastures in this state do not yield one half the amount of grass of new pastures. The reason of this is because the pastures have *run out*, as it is termed. They should be converted into tillage; and I will add, the stumps and stones, if possible, should be removed.

Our farmers generally make great efforts to improve their mowing lands, with a view to increase their hay crops; but can it be said that they make great efforts to improve the condition of their grazing lands? If a farmer has not, generally, an abundance of summer food for his sheep, cows, and other stock, all his winter food for cattle will not make him wealthy. Perhaps some of our farmers might further their interests by converting a part of their mowing lands into pasture, and by cultivating roots more largely as winter food for their cattle.

Lastly, ploughing in green crops may be mentioned. The farmer who practices summer fallowing or frequent ploughing, may as well as not, sow some kind of seed, as buckwheat, for instance, to be turned under by the plough. By this method, the farmer may bring his land to a very high state of cultivation, at a moderate expense. R.

Rumford, Feb'y, 1838. [*Maine Farmer.*

The *Sugar Beet* will be cultivated this year to a considerable extent in this country, not merely for the purpose of making sugar, but as food for animals. The yield to an acre is enormous, averaging from eighteen to thirty tons. The beauty of it is, the soil is benefited by it, as in France, where many sterile or poor pieces of land have been resussitated, and after beets have been planted a few years, the soil yielding excellent crops of wheat. Nothing is lost from this plant, as the tops of potatoes or the stalks of wheat and broom corn. The leaves are used in France as green or dry fodder. The pumice, after being used for sugar, is excellent for all kinds of animals, and the beet itself furnishes an epicurian repast for cows and swine. A Hadley farmer told us the other day, that he kept his hogs upon sugar beet two months, giving them nothing else, not even a pail of water. With this sort of keeping, they waxed strong and grew fat as an alderman. One hundred pounds of beet will yield seven pounds of sugar, giving at twenty tons to the acre, a product of about $1500!—*Northampton Courier.*

A Good Project.

An association of gentlemen in Monmouth county, N. J., have offered a premium of $100 to the individual, in the county, who shall produce the greatest number of pounds of cocoons from the sixteenth of an acre of land. The worms to be fed from the foliage of trees of the growth of the coming season, with the branches cut off even with the ground. The competitor to make one or more crops, as he pleases. The object is not only to ascertain the greatest quantity of silk which can be made from an acre the first year; but to excite a spirit of competition among silk growers, which cannot fail of producing the happiest results, both to the competitors and the community. We should be pleased see this laudable example imitated by the citizens of every county in the country; for we can conceive no better project to quiet the fears and remove the prejudices of the uninformed and unbelieving.

The only difficulty in the way of making a like experiment in every county and district throughout the United States, is want of funds, and this may be removed in the same manner, we presume, it has been in Monmouth,—voluntary subscription, or contribution. Let the silk growers within given limits make up a purse by an equal capitation tax, and appropriate it to the successful competitor of their own number, and it would awaken a spirit of rivalry, and stimulate exertion and effort to a degree that would give a full indemnity against loss to the unsuccesful, while at the same time the winner would receive a liberal bounty, besides the proud reflection of coming off victorious in a novel, but honorable species of competition.—*Silk Culturist.*

Improvement in Barns.

Mr. Holmes:—The following are some improvements on the old method of building barns; at least it seems to me so, having tried the experiment.

Add three feet to the usual height, and you save a large amount of space, with the same top and bottom—only by a little extension of the sides. Raise the barn floor three feet, by means of girts and sleepers; this, with the underpinning, will give a space of four or five feet in height, under the floor, which should be left open at the south end, for the accommodation of sheep and calves in cold, stormy weather. The great doors should be on the opposite side of the barn from this opening; as it is a filthy practice to drive into the barn through the yard, and should not be indulged in. A wharf or bridge must be made under or before the doors, having a true descent from the floor to a point three rods distant,—which, if the ground be level, will make the rise about one and a half feet per rod; an ascent that may easily be overcome with any load which can conveniently be drawn about the field. The floor may be attained from the small doors by stairs, as convenience may require.

Ladders may be framed in, each side of the barn floor from the girt to the beam, it may prevent breaking one's neck by climbing on a loose one.

By this arrangement the length of your horses' necks may be saved in stable room, as it will be convenient to feed them on the barn floor. A plank should be placed at the edge to keep them from getting their hay under their feet. A weather-cock may be placed on the top to show the course of the wind,—not a fish, for they are too much out of their element so high in the air,—but the real image of the one on the dung-hill. This is not a bad appendage, to a well-finished barn.

All of which is respectfully submitted to your consideration and disposal, by your friend JNO. MARBLE.

Vassalboro', Feb. 1838. [*Maine Farmer.*

Exactness and Calculations.

We cannot urge too strongly upon the farmers every where, the importance of ascertaining, by exact examination and measurement, where measurement is practicable, what they produce, what is the value, and what is the cost of their productions. In general, farming is carried on as a system of random guess-work. This ought not to be. In order to know what we can do and ought to do, it is of the first importance to understand what we have done. The constant objection to such exactness is, that "it is to much trouble, such exactness takes too much time." Now, we can answer for it, that it takes very little time, and that it gives very little trouble. It would be, in the first place, important for every farmer to know the contents in acres and value of every enclosure on his farm, and this once done is done forever, as long as those enclosures remain; or if he takes up but part of his field for cultivation, there is no great difficulty in having that part carefully measured. In his cultivation it would be easy for him to ascertain carefully the quantity of land under cultivation; to keep an exact account of the number of days employed in that cultivation; the number of loads of manure applied to it; the quantity of seed sown; and the time of sowing. In respect to all grain or vegetable crops, they of necessity pass through the bushel or the half bushel measure. There can be no difficulty in keeping the numbers of these measures. In regard to his hay and straw, there can be no great trouble in keeping the number of loads as he carries them in; and making a pretty accurate estimate of their quantity, or in ascertaining the quantity contained in any single bay or mow; or in other modes of coming at a near estimate of the quantity collected. In regard to his dairy produce, nothing can be easier than ascertaining by various simple trials, or by actual weighing and measuring, the quantity of milk, or butter or cheese. So likewise of his pork and beef. There is no reasonable excuse for his not doing this; and if he would only introduce some regular system into his proceedings and get into the habit of exactness in accounts, we can assure him the pleasure of doing it, the satisfaction of coming at precise results, the being able when he is inquired of about his farming, or when he hears about the farming of others, to say in respect to his own affairs *what he knows*, instead of saying merely *what he guesses*, would compensate him a hundred fold for all the trouble it may occasion and all the time it may occupy.—*New England Farmer.*

Sugar Beet with Corn.

A friend has mentioned a plan of growing beet roots that has been adopted by a distinguished farmer of Chester Co., Pa., which is said to have been very successful. They are grown in alternate rows with corn; the corn being planted in rows six feet apart, a row of beets intervenes—the corn crop is very little if at all diminished—the labor is not much increased, and a very good crop of beets is obtained; the shade of the corn is supposed to be favorable to the beet. This plan may be worthy of a trial by those who have not prepared a piece of ground for roots, and who are anxious to have good winter food for their cattle.—*Baltimore Farmer.*

Ezekiel Rhoads states, that within one week after his sugar beets were exhausted, the butter from three cows was reduced from twenty to fourteen lbs. per week. His butter was in much higher repute while feeding on the sugar beet than it had ever before been during winter.—*Farmer's Cabinet.*

Economy of Manures.

Parkhurst, an eminent British farmer and agricultural writer, who resided some years near Baltimore, in speaking of our economy in manures, says, that

"The farm yard manure in that country (the United States) is of little value; for it is ill-managed, the straw weak, and the generality of horned cattle so poor, that their dung is light and worthless."

Now if this charge be true, as there is too much reason to believe it is, let us not scold at the exposure of our fault, but set to work in earnest to remove the reproach, by making our straw stronger, our cattle in better condition, and our manure, consequently, more abundant and valuable.—*Poughkeepsie Telegraph.*

Lime for Wheat.

Dr. Jackson, Geologist of the State of Maine, remarks—"I find by chemical examination of several remarkable soils, that a very minute quantity of carbonate of lime, viz: from 1 to 2 per cent., is amply sufficient to render them capable of bearing heavy crops of good wheat. I am also satisfied that a soil is incapable of producing wheat of good quality if it does not contain carbonate of lime; for this substance is an essential ingredient of this grain."—*Yankee Farmer.*

Rural Embellishments.

It is delightful to witness the progress of a refined taste in the increase of rural embellishments; in the planting of trees, the training of vines, the cultivation of flowers, and the formation of ornamental gardens.—Among the richest and purest pleasures, which the human mind can take in, are those drawn directly from nature. A fondness for natural scenery is a passion which we cannot cultivate to excess; and the gratifications of such a taste multiply as the capacity of enjoyment is extended. A taste for pleasures of this kind, prevents the morbid excesses of the lower appetites; diverts us from their indulgence; and accustoms the mind to a purer aliment, whose only tendency is to improve and exalt our nature. The cultivation of such a taste is altogether favorable to the religious character. In proportion as our perceptions of beauty are acute and vivid, the wonders of creation spread themselves out before us in unmeasured profusion; and we find continually gaining strength within us, a grateful reverence for that goodness which has so infinitely multiplied the forms of beauty in every part of creation; and evidently with no other view than to afford pleasure.

We might multiply arguments and reasons, why we should cultivate this taste; and try all that human art can do to make the world beautiful, to adorn our yards, porticoes, fences, windows, dwellings and streets, with shrubs and flowers and trees. Such embellishments are an immense gain to a city; and we look upon the lady, who will ornament her windows in the city with a gay assemblage of geraniums, and daphnes, and hyacinths, and myrtles, and roses, as eminently a public benefactor. The amount of pleasure thus given, if it could be measured in the aggregate, or if there were any standard by which it could be determined and compared, would be found immensely to exceed that which is given by some brillant rout or ball; and this at a hundreth part of the expense, and leaving no sting behind.

We have been led into these remarks by witnessing the last week in our rides through Charlestown, a line of elms and maples on each side of Main street, from the Square almost to the foot of Winter Hill, recently planted, and carefully protected. This is a most honorable work, and we hope will be imitated throughout the state. If there were no motives of taste, no public spirit which would lead to it, yet the increased value, which it will actually give to the property along the whole line, will ten fold repay the expense. We understand that the late Timothy Walker, Esq., left in his will $400, to be appropriated to the setting our of ornamental trees in the streets; a noble bequest; and that a Tree Society has been formed among the young men, by the subscription of a dollar each per year, for the purpose of planting ornamental trees throughout the town. They could hardly engage in a more public-spirited or useful work. Charlestown, as a place of residence, combines as many local advantages as are to be found in the suburbs of any city. A block of brick buildings has lately been erected on the eastern side of the Main street, in front of the Bridge Estate, in very fine taste; and which it would be wise in the Bostonians to look at, if they think it possible that any thing like taste or refinement can be found out of their own city. In respect to proportions, style and position, as far as exterior is concerned, Boston, it is believed, has no block of buildings to be compared with it. We hope our Charlestown neighbors will continue their improvements, until their town is rendered as beautiful and attractive as its local capabilities admit of its being made.—*New England Farmer.*

Stocking Knitting.

Were men in the day of prosperity to look out for adversity; in the hay day of summer to lay up for winter; were there no drunkards, nor foolish spendthrifts—our world would soon lose the slanderous nick-name of being miserable. Were one-tenth of the money that is spent in buying and tuning piano-fortes laid out in knitting needles, and one-fourth part of the time that is lost in giggling, employed in making stockings, I verily believe the balance of trade would be in our favor, and you would not see so much splendid misery walking up Broadway.

I do not think, Mr. Editor, you ever saw a piano in the habitation of the Friends, nor did you ever see any *splendid misery* there.

But to return to the system of stocking knitting. I verily believe that if all the women in town and in the country were to commence knitting, before seven months the balance of trade would be in our favor. At present it is sadly the reverse: bills on London fifteen per cent. above par. Now, I think the suspension of stocking knitting lies deep at the root of this evil. In the good old times when Washington was President, his lady was not too proud to knit stockings for her general. Then we had only one hosiery store; now we have upwards of two thousand stocking shops. Then the mother and girls knit stockings for all the family; now it is computed that two millions of dollars are sent to Europe every year, to clothe the feet and ankle bones of the New Yorkers alone. This one article is sufficient of itself to kick both the beam and balance of trade in our faces. Then our flour went to Europe by the hundred thousand barrels per annum, now we beg from the hungry Hessians a bushel of wheat or a chaldron of rye. You know, Mr. Editor, that whether they are right or wrong, my head or my pen is always ready to defend the weaker sex. I speak not to their blame; it is that greatest of all tyrants, *Fashion*, that has driven industry from the door. I wish them to look back on the days of unsophisticated employment; for they are never happy, (those dear sisters) except their feet, their hands, or their tongues, are in motion. Neither would we see so many greyheaded spinisters wearing foreign hair; for those cold-hearted bachelors who reckon every thing by dollars and cents, would find it more profitable to take to themselves wives who would mend their stockings, patch their coats, and put the apple in the heart of a dumpling, than to live in a state of single unhappiness.—*Grant Thorburn.*

THE JUSTLY CELEBRATED IMPORTED HORSE

TURK,

THE property of THOMAS WEDDLE, is now at the old Norton Farm, East Bloomfield, five miles west of Canandaigua, and will be kept there for Mares the whole of this season.

TURK is five years old, of a beautiful bright bay color, with black legs, comprising every quality of size, symmetry and action, in the highest degree, and has proved himself, for two seasons, a sure and excellent stock-getter.

PEDIGREE.—This noble animal, imported direct to this country by the present owner, was bred by Wm. Cobb, Esq. of Lonsbro', county of York, England. He was got by Goodlass Catfoss, dam by Rotsey's Old Volunteer; grand dam by Buttle Stephenson's noted coach horse Caythorp; great grand dam by Lawrence Stephenson's old horse, which went in one season to 300 mares. Catfoss was got by Young Turk; his dam by Volunteer; grand dam by Dunsley's noted coach horse.

TERMS.—Twelve Dollars the season, if paid on or before the first of October; or Fourteen Dollars, if not paid until the first of April.

ALSO, THE THOROUGH BRED STUD COLT,

HUMPHREY CLINKER,

Will stand as above, and take a limited number only of Mares. Terms—$15 the season, for common Mares; for thorough bred Mares, $25 the season.

This Colt, 4 years old, is a fine bay, of pure racing blood, and was got by Allan's "*Humphrey Clinker*," one of the most famous and best horses of that breed in England. His dam, Miss Andrews, (sister to Caroline,) by Catton; grand dam by Dick Andrews; her dam by Sir Petre; Play or Pay's dam by Herod, &c. &c.

Good accommodations for Mares, at the risk and charge of the owners. THOMAS WEDDLE.

East Bloomfield, May 9, 1838. my 19–1t

Spring Wheat.

A NEW supply of Siberian Bearded Spring Wheat, just received at the Rochester Seed Store. This wheat will generally succeed well, if not sown later than the 20th of May.

May 12 REYNOLDS & BATEHAM.

Morus Multicaulis.

A FEW hundred genuine Morus Multicaulis, or Chinese Mulberry trees, just received and for sale by

May 5 REYNOLDS & BATEHAM.

Siberian or Tartarian Oats.

A GOOD supply of this valuable variety of oats—a genuine article—for sale at the Rochester Seed Store.

The numerous accounts which have been published respecting the qualities oft hese Oats, render any further recommendation entirely superfluous, at least to the readers of the Genesee Farmer.

Dr. Wm. C. Dwight of Moscow, has raised them for several years, and thinks them decidedly preferable to any other variety. He recommends sowing them very thick, (from 3 to 4 bushels to the acre,) as it renders them less liable to lodge. They yield with him from 70 to 80 bushels to the acre.

May 5. REYNOLDS & BATEHAM.

THE IMPORTED HORSE

ALFRED,

THE property of George Fordon, was bred by Mr. Fox of Ryton, county of York, England; is six years old, and of a rich bay color; was got by Strickland's King Alfred; his dam by Mr. Stubb's old horse; grand-dam by Frank's Volunteer; great-grand-dam by Harrison's Horse of Sketenbeck; Mr. Stubb's horse was by Dunsley's old horse; dam by Owston's horse of Seamer; Mr. Dunsley's horse was by Agar's old Dart; dam by old Rainbow; Frank's Volunteer was by Milner's old Volunteer, of Bransburton; King Alfred was bred by Sir Geo. Strickland.

TERMS.—Fourteen Dollars, to be secured by approved notes, payable on the first of April, 1839. If Twelve Dollars be paid by the first of October next, the same will be accepted in discharge of a note for Fourteen Dollars.

The Horse will stand at my stable, on the farm lately occupied by Mr. Jesse Earl, about three miles southwest of Geneva, and half a mile south of the turnpike.

Seneca, May, 1838. GEORGE FORDON.

THE NOTED BULL

ALEXANDER,

Imported by Mr. Thomas Weddle, of the pure improved Durham short-horned breed, will stand at my stable during the season for Cows, at Ten Dollars each.

May 19–1t GEORGE FORDON.

Nursery for Sale.

A RARE chance is now offered for the purchase of a young NURSERY AND FARM at Covington, Ky., which fronts half a mile on the Licking River, within a mile of its junction with the Ohio, directly opposite to Cincinnati. The Nursery and Farm comprise 101 acres of the very richest Kentucky soil; about 50 acres are laid down to mowing; between 30 and 40 to tillage, including the Nursery, and from 12 to 15 acres are filled with timber for fencing and fuel. On the premises is an Orchard of 100 thrifty young apple trees, mostly winter fruit; was set out last year. Also, another Orchard of 200 pear trees, comprising 72 different sorts, including all the varieties of winter table pears, of which the demand for the New Orleans market is almost unlimited

On the place is a good Brick House, built in 1816, with a first rate well of water, 45 feet deep, a large new Green House just finished, two large Barns, built in 1835, and all the usual out-houses—also, a Farm House, with two rooms that will let for $50 per annum, suitable for a gardener or small farmer.

The Nursery was laid out in 1835, and bids fair to do a very lucrative business, as there is nothing of the kind west of the mountains that can compete with it, for the variety and choice character of the fruits cultivated, which were all selected from the Nurseries of BUEL & WILSON and WM. KENRICK, and others, and comprise all the new sorts introduced by the Massachusetts Horticultural Society from Europe, and all the choice sorts cultivated near Boston; among them are 80 varieties of Pears, 50 of Apples, 50 of Peaches, 40 of Plums, 30 of Cherries, with a great variety of Grapes, Evergreens, Ornamental Shrubs, &c. &c. There are at least 100,000 seedlings of Apples, Pears, &c. of one and two years growth, for inoculation, now growing on the place.

The above offers a rare chance for one or two enterprising young men, to do a great business, in a perfectly healthy location, where there is little or no competition, and a demand for trees that has thus far exceeded the greatest expectations of its founders, and their ability to execute orders. It will be sold at a great bargain, on account of the death of the active partner of the concern, and the non-residence of the other.

For terms, apply (*post paid*) to S. C. PARKHURST, at Cincinnati, Ohio. May 19–4t

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Early Seed Potatoes.

EARLY Manley or June, and Early White Kidney Potatoes, together with a great variety of other choice kinds, for sale at the Seed Store of

May 5 REYNOLDS & BATEHAM.

Just Published,

A CATALOGUE of Garden, Field and Flower Seeds, Green House or Parlor Plants, Agricultural and Horticultural Implements. Books, &c. for sale at the Rochester Seed Store, fourth edition, with practical directions for the cultivation of vegetables and flowers, and the management of plants in rooms—a pamphlet of 60 pages—which may be had gratis on application at the Seed Store, or sent by mail if desired. (April 28) REYNOLDS & BATEHAM.

Improved Durham or Short Horn Bulls.

THE subscriber has several yearling bulls of this very choice breed for sale, from direct imported stock; also, one half Devon and Durham do. A. B. ALLEN.

Buffalo, April 3d, 1838. ap 14–6w

Drill Barrows or Planting Machines.

A NEW supply of Robbins' Patent Planting Machines, just received at the Rochester Seed Store.

Also, a number of Merchants' Patent Drill Barrows. [See No. 18, current vol. of the Genesee Farmer.]

May 5. REYNOLDS & BATEHAM.

Early Red-blazed Seed Corn.

THIS variety of Indian Corn is very productive; the ears are of good size, and by experiments made the past season, it was found to ripen earlier than almost any other variety, not excepting the celebrated Dutton. It is for sale by

May 5 REYNOLDS & BATEHAM.

☞ Many other choice varieties for sale as usual.

Root Cultivation.

A LARGE supply of new and genuine Ruta Baga, Mangel Wurtzel, Sugar Beet and Orange Carrot Seed, just received at the Rochester Seed Store.

REYNOLDS & BATEHAM.

Rochester, April 21, 1838.

New Onion Seed.

YELLOW Dutch, Large Strasburg, White Portugal and Large Red Onion Seed, the growth of 1837, just received direct from England.

The crop of Onion Seed was almost a total failure in this country last season, and being unable to obtain a supply of NEW SEED in the United States, we last fall sent an order to England for a supply from that country. It has arrived in fine order, and we are confident will prove a superior article.

REYNOLDS & BATEHAM.

Rochester, April 21, 1838.

Great Arrivals

AT THE ROCHESTER SEED STORE.

WE have received by some of the first boats, *a number of* TONS *in weight* of English and American Field and Garden Seeds, Tools, Books, &c. Our assortment for the season is now full and complete, and we would inform our distant customers and agents, that their orders which have been already received, will be immediately attended to, and the articles put up and forwarded with all possible despatch.

The demand for seeds by wholesale during the winter was so great, that our fall stock of many kinds had become entirely exhausted; but the quantities now received are so great, and the varieties so numerous, that our friends need have no scruples about sending us extensive orders. We are so confident that these seeds will prove genuine, and give the best of satisfaction, that we feel a great degree of pleasure in offering them to the public. And we most cordially invite all who feel an interest in the advancement of Agriculture and Horticulture, to call and examine for themselves.

☞ Catalogues sent gratis to all applicants.

REYNOLDS & BATEHAM,

Nos. 3 and 5 Arcade Hall, Rochester, N. Y.

April 21, 1838.

Improved China, Berkshire and Tuscarora Pigs.

THE subscriber expects in the months of May and June, several litters of the above superior animals. The price of the Chinas, at 6 weeks old, per pair, will be $10,00

Berkshires and Tuscaroras, " " " 12,00

and for every month added to the above age of pigs, $1,25 will be charged on the price of the former, and $1,50 on the latter. These hogs are universally admired wherever known, and are considered the choicest and best breeds of England and America, returning the farmer a greater amount of pork for their feed than any others, and therefore the most profitable stock that can be kept.

The Improved Chinas are celebrated for the sweetness and delicacy of their meat, are easily kept fat in pasture without other food, being perfectly quiet and not wandering at all; are very handsomely spotted, a clear black and white, the colors about equal; have small short heads, ears and legs, with deep and broad bodies, and weigh from 300 to 400 lbs. according to keep at eighteen months old. There is nothing equal to these boars for crossing with other hogs, as they reduce their long coarse heads and legs, and give breadth and depth to their carcase quicker than any other kind. They have no affinity to what is commonly called the Grass breed of hogs, being of a distinct race, & entirely superior every way.

The Berkshires are highly prized for their lean, tender and juicy hams, are darker spotted than the above, and will weigh at the same age from 4 to 600 lbs.

The Tuscaroras are a cross of the China with the Berkshire and other superior breeds, have nearly the quietness and aptitude to fatten with the China, are of the same color, and weigh equal to the Berkshires. A. B. ALLEN.

Buffalo, April 3d, 1838. ap 14–6w

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL. MOULSON.

apr 15–tf

N. B. CASH will be paid for a few thousand two years old APPLE TREES

Monroe Horticultural Garden & Nurseries, GREECE, MONROE CO., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.